ABSTRACT

A wireless communication method and system for assigning multi-paths to Rake receiver fingers. A Rake finger assignment database is established in which multi-path signals are categorized into a verified group and an unverified group. Each multi-path is assigned to an individual bin in the database. Each bin includes a pilot phase data field, an antenna data field, a code data field, an averaged signal strength data field, an assigned flag data field, a verification flag data field, an update flag data field, an assigned Rake finger number data field and an assignment time counter data field. The multi-path signals in the verified group are further categorized into an assigned subgroup and an unassigned subgroup. During a measurement interval, each of a plurality of newly measured multi-path signals is compared to the multi-path signals in the database and is processed accordingly.